

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :
Victor P. Crome :
Serial No. :
(Reissue application of :
U.S. Patent No. 5,871,624 :
Filed: Herewith :
For: MODULAR CERAMIC OXYGEN GENERATOR :

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D. C. 20231

Sir:

Prior to examination of the above-identified application,
please amend the application as follows.

IN THE CLAIMS

Please amend the claims as follows:

1. (Amended) An ionically conductive ceramic element
comprising:

a plurality of tubes each having interior and exterior
surfaces, and each having a closed end and an open end;

a tube support member receiving open ends of said plurality of
tubes;

a first electrically conductive coating covering said exterior

surfaces of said plurality of tubes; and

a second electrically conductive coating covering said interior surfaces of said plurality of tubes; [and]

said ionically conductive ceramic element having at least two columns of tubes and a first electrode connectable to a source of electrical potential at a first polarity and covering an exterior surface of [said] a first column and an interior surface of [said] a second column of tubes and a second electrode covering an exterior surface of said second column of tubes connectable to one of a source of electrical potential at a second polarity or covering an interior surface of a third column of tubes. [and an interior surface of said first column of tubes;

said first electrode being connectable to a source of electrical potential at a first polarity and said second electrode being connectable to a source of electrical potential at a second polarity.]

6. (Amended) An oxygen generator, comprising:

a first ceramic element having a tube support member and an array of tube members extending from said tube support member and formed into columns and rows;

a second ceramic element adjacent said first ceramic element;
and

a seal between said first ceramic element and said second ceramic element;

said first ceramic element having at least two columns of

tubes and a first electrode connectable to a source of electrical potential at a first polarity and covering an exterior surface of [said] a first column and an interior surface of [said] a second column of tubes and a second electrode covering an exterior surface of said second column of tubes either connectable to a source of electrical potential at a second polarity or covering an interior surface of a third column of tubes. [and an interior surface of said first column of tubes;

said first electrode being connectable to a source of electrical potential at a first polarity and said second electrode being connectable to a source of electrical potential at a second polarity.]

Please add the following new claims:

12. The ceramic element of claim 1, wherein said first ceramic element is integrally formed.

13. The oxygen generator of claim 6, wherein said plurality of tubes are formed into rows and columns on said tube support member wherein each tube is connected to said first electrode and said second electrode and first and second electrode portions of each of said tubes in a column are electrically connected in parallel and wherein each of the tubes forming a row are electrically connected in series.

14. The oxygen generator of claim 13, wherein said first and

second electrodes are formed by

cuts in said first and second electrically conductive coatings between said columns of tubes, said cuts extending longitudinally of and between the columns of tubes so that the portions of said first and second electrodes on opposite sides of each said cut are electrically separated, vias extended through said first and second surfaces adjacent each of said tubes and

electrical connections extending through said vias connecting a first electrode portion of each said tube in a row to a second electrode portion of a tube in an adjacent column in the same row to form a series connection across each row of tubes.

15. The oxygen generator of claim 14, wherein said electrical connections are constituted by the material forming said first and second electrodes coating the surfaces of said ceramic electrolyte extending through said vias.

16. The oxygen generator of claim 6, wherein each the plurality of tubes is spaced from adjacent tubes.

REMARKS

Before examination on the merits, please enter this Preliminary Amendment.

Claims 1-11 remain pending in the application. New claims 12-16 have been added.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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